



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,761	03/18/2004	Dustin L. Winters	87408RLO	6694

7590 05/16/2006  
Pamela R. Crocker  
Patent Legal Staff  
Eastman Kodak Company  
343 State Street  
Rochester, NY 14650-2201

EXAMINER

ANYA, IGWE U

ART UNIT	PAPER NUMBER
----------	--------------

2891

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

3/2

<b>Office Action Summary</b>	Application No. 10/803,761	Applicant(s) WINTERS ET AL.	
	Examiner Igwe U. Anya	Art Unit 2891	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Election/Restrictions***

1. This application contains claim drawn to an invention nonelected with traverse in Paper No. 12162005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2891

4. Claims 1 – 3, 6 – 14, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanzawa et al. (US Patent 6858454) in view of Brody et al. (US Patent 6943066).

5. Kanzawa et al. teach a method for making a thin film device (figs. 1 – 20), comprising:

providing a substrate (figs. 11) having one or more test regions (R<sub>mn</sub>) and one or more device regions (R<sub>tp</sub>) wherein the one or more test regions are spaced apart from the one or more device regions;

forming at least one test opening spaced from the plurality of openings for permitting the deposition of film onto a test region of the substrate (fig. 11);

moving the substrate into a least one deposition chamber for deposition of at least one thin layer (col. 6 line 60 – col. 7 line 13);

depositing the at least one thin layer selectively onto the at least one device region and the at least one test region on the substrate (col. 6 line 60 – col. 7 line 13) ;

measuring a property of the at least one thin layer in the at least one test region (col. 7 lines 14 – 22);

adjusting the deposition process in accordance with the measured property (col. 7 lines 23 – 26);

wherein the measuring occurs in the at least one deposition chamber (col. 7 lines 14 – 22);

wherein the properties include target thickness and the adjusting step adjusts the deposition towards such target thickness (col. 7 lines 14 – 22);

wherein the properties include dopant concentration, chemical composition, or optical properties or combinations thereof (col. 7 lines 14 – 22);

6. Kanzawa et al. lack :

deposition of an organic material for an OLED device through a shadow mask;  
the mask structure having a plurality of openings which respectively correspond to the at least one device region and arranged to permit the deposition of organic material on the substrate;

wherein the depositing and measuring occur under a vacuum pressure;

wherein the substrates are kept at a vacuum pressure from the depositing of the at least one thin layer until at least the measuring of the at least one thin layer; and

a step of moving the substrate from the at least one deposition chamber into a measurement chamber where the property is measured.

7. However, Brody et al. teach:

deposition of an organic material for an OLED device through a shadow mask (col. 5 lines 11 – 60);

wherein the mask structure have a plurality of openings which respectively correspond to the at least one device region and arranged to permit the deposition of organic material on the substrate (fig. 1);

moving the substrate sequentially into a least two deposition chambers for deposition of at least one organic layer using a shadow mask in each deposition chamber (col. 11 lines 4 – 65); and

wherein the depositing occur under a vacuum pressure (col. 5 lines 57 – 60).

8. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Brody et al. into the Kanzawa et al. reference to deposit and measure the characteristics of organic film for an OLED film integrally. Furthermore, it is obvious to one of ordinary skill in the art that in-situ measurements or post formation measurement of film characteristics of deposited films are done in the deposition ambient.

9. Claims 4, 5, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanzawa et al. (US Patent 6858454) in view of Brody et al. (US Patent 6943066), and further in view of Shtein et al. (US Patent 6716656)

10. The Kanzawa/Brody et al. reference teaches the features previously outlined, but lacks where the pressure of the vacuum is less than 0.001 Pa.

11. However, Shtein et al. teach a vacuum is pressure less than 0.001 Pa. during deposition an organic material through a shadow mask, for an OLED (col. 4 lines 42 – 55).

12. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Shtein et al. into the Kanzawa/Brody et al. reference for optimization.

### ***Response to Arguments***

13. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

***Contact Information***

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igwe U. Anya whose telephone number is (571) 272-1887. The examiner can normally be reached on M - F 8:30am - 5:00pm.

16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William B. Baumeister can be reached on (571) 272-1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2891

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Igwe U. Anya  
Examiner  
Art Unit 2891

IA

May 10, 2006



**B. WILLIAM BAUMEISTER**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2800**